

Pluggable Multi-Pole SPD for Photovoltaic Systems

FLP-PV1000/2+G-(S)

Class I • Class II • Type 1 • Type 2



Location of Use: String box, Inverter
 Mode of Protection: (DC+) - PE, (DC-) - PE, (DC+) - (DC-)
 Surge Ratings: I_{Total} = up to 12.5 kA (10/350 μ s)
 I_{Total} = up to 40 kA (8/20 μ s)
 IEC/EN Category: Class I+II / Type 1+2
 Protective Elements: High Energy MOV and GDT
 Housing: Pluggable Design
 Compliance: IEC 61643-31:2018
 EN 50539-11:2013+A1:2014

Technical Data

FLP-PV1000/2+G-(S)

1000

IEC Electrical

| | | | |
|--|---|-------------|---------------|
| Maximum Continuous Operating DC Voltage | (DC+) - PE, (DC-) - PE (DC+) - (DC-) | U_{CPV} | 725 V |
| Nominal Discharge Current (8/20 μ s) | | I_n | 20 kA |
| Impulse Discharge Current (10/350 μ s) | | I_{imp} | 6.25 kA |
| Specific energy [DC+ -> PE/DC- -> PE] | | W/R | 9.76 kJ/ohms |
| Total Discharge Current (10/350 μ s) | | I_{Total} | 12.5 kA |
| Specific energy [DC+/DC- -> PE] | | I | 39.06 kJ/ohms |
| Total Discharge Current (8/20 μ s) | | I_{Total} | 40 kA |
| Maximum Discharge Current (8/20 μ s) | | I_{max} | 40 kA |
| Voltage Protection Level | (DC+) - PE, (DC-) - PE (DC+) - (DC-) | U_p | 2500 V |
| Response Time | | t_A | < 25 ns |
| Short-Circuit Current Rating | | I_{SCPV} | 2000 A |
| Number of Ports | | | 1 |

Mechanical & Environmental

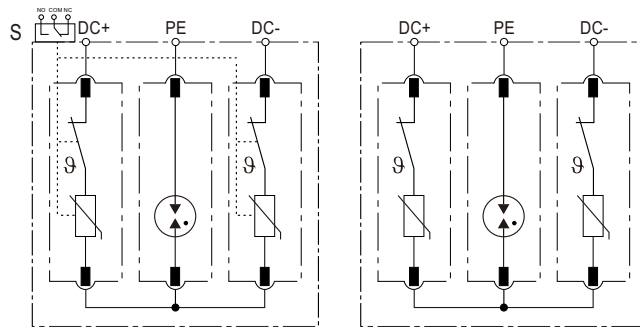
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|------------------------------------|-----------|--|
| Operating Temperature Range | T_a | -40 °F to +158 °F [-40 °C to +70 °C] |
| Permissible Operating Humidity | RH | 5%...95% |
| Atmospheric pressure and altitude | | 80k Pa ... 106k Pa / -500 m ... 2000 m |
| Terminal Screw Torque | M_{max} | 39.9 lbf-in [4.5 Nm] |
| Conductor Cross Section (max) | | 2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible) |
| Mounting | | 35 mm DIN Rail, EN 60715 |
| Degree Of Protection | | IP 20 (built-in) |
| Housing Material | | Thermoplastic: Extinguishing Degree UL 94 V-0 |
| Thermal Protection | | Yes |
| Operating State / Fault Indication | | Green ok / Red defect |
| Remote Contacts (RC) | | Optional |
| RC Switching Capacity | | AC: 250V/0.5 A; DC: 250V/0.1 A; 125V/0.2 A; 75V/0.5 A |
| RC Conductor Cross Section (max) | | 16 AWG (Solid) / 1.5 mm ² (Solid) |

FLP-PV1000/2+G-(S)

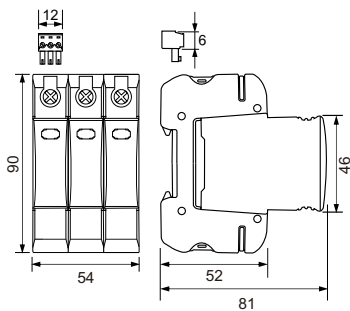
Internal Configuration

Legend

- PE Protective Earth
- S Signalling Contacts Optional



Dimensions & Packaging



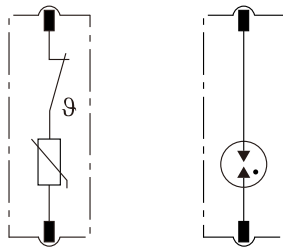
Dimensions & Packaging

| | |
|---------------------------------|----------------------|
| FLP-PV1000/2+G-(S) | 1000 |
| Single Unit DIN 43880 Dimension | 1 CTN |
| Packaging Dimensions (HxWxL) | [220 x 230 x 330 mm] |
| Minimum Order Quantity | 20 Units |

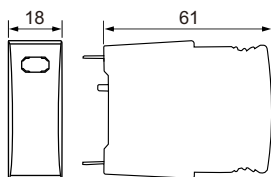
Plug Internal Configuration

FLP-PV1000G

FLP-PV1000GPE



Dimensions & Packaging



Dimensions & Packaging

| | |
|---------------------------------|----------------------|
| FLP-PV1000G/0 | 1000 |
| FLP-PV1000GPE/0 | 1000 |
| Single Unit DIN 43880 Dimension | 1 CTN |
| Packaging Dimensions (HxWxL) | [220 x 230 x 330 mm] |
| Minimum Order Quantity | 64 Units |